

REMARKS

Applicants thank the Examiner for the very thorough consideration given the present application. Claims 1-2 and 4-15 are currently pending in this application. None of the claims have been amended. Accordingly, no new matter has been added.

In view of the remarks herein, Applicants respectfully request that the Examiner withdraw all outstanding rejections and allow the currently pending claims.

Issues Under 35 U.S.C. 103(a)

Momoda '038

Claims 1, 4-7, 9, 10 and 15 stand rejected under 35 U.S.C. 103(a) as obvious over EP 1,130,038 (hereinafter "Momoda"). Applicants respectfully traverse.

The Examiner asserts that Momoda discloses a curable composition comprising (A) a polymerizable monomer, (B) a polyfunctional monomer, (C) a difunctional polymerizable monomer and (D) a photochromic compound. The Examiner argues that it would have been obvious for one of ordinary skill in the art to optimize the ratio of monomers in Momoda in order to achieve a product with higher tensile strength.

Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966). "[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability." *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). A patent composed of several elements is not proved obvious merely by demonstrating that each of

its elements was, independently, known in the prior art. *KSR Int'l Co. v Teleflex Inc.*, 82 USPQ 2d 1385 (U.S. 2007). There must be a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. *Id.* The Supreme Court of the United States has recently held that the "teaching, suggestion, motivation test" is a valid test for obviousness, albeit one which cannot be too rigidly applied. *Id.* "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *Id.* (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

Momoda discloses a photochromic cured product exhibiting excellent matrix characteristics, such as high hardness and a high heat resistance (see [0013]-[0014]). However, as previously noted, Momoda is completely silent with regard to the tensile strength of the cured product.

The Examiner, however, argues as follows:

"The Examiner takes the position that the cured product of these compositions would have tensile strengths close enough to said strength that it would have been obvious for one of ordinary skill in the art to optimize the ratio of monomers to achieve a product with higher tensile strength. One of ordinary skill would appreciate that the ratios of monomers used would affect the resultant tensile strength because of their varying hardness values. Lenses must be able to resist impacts and drilling in order to be of use. As such, one of ordinary skill would recognize the necessity of creating a lens that can withstand a baseline amount of abuse. Thus, one could reasonably experiment with

the conditions of the invention to arrive at a tensile strength greater than 20kgf" (see Office Action at page 7, item no. 33).

Applicants respectfully disagree.

As noted above, there is absolutely no description in Momoda with regard to the tensile strength of the cured product. Evidently, Momoda cannot possibly teach or suggest controlling the ratio of monomers so as to specifically obtain a cured product having a tensile strength of 20 Kgf or more, as presently claimed.

Moreover, as to the Examiner's assertion that "the ratios of monomers used would affect the resultant tensile strength because of their varying hardness values," Applicants submit that there is no correlation between tensile strength and HL hardness. The Table below reproduces the hardness (HL hardness) values of the photochromic products of Momoda, as well as the values exhibited by the presently claimed cured products (see also the Declaration Under 37 C.F.R. 1.132 filed on February 20, 2009):

Ex. No.	1	2	3	4	5	6	7	10	11	12	13	14	15	16	17	18	19
Tensile Strength (kgf)	16	10	6	14	11	8	5	10	16	11	15	9	13	10	8	7	10
HL hardness	88	96	100	94	86	93	100	96	95	95	90	93	96	96	100	88	92

Ex. No.	23	24	25	27	28	32	34	35	36	37	45	47	50	57
Tensile Strength (kgf)	12	12	12	15	10	15	17	13	10	11	11	10	10	14
HL Hardness	100	88	84	93	90	89	86	90	96	96	90	96	82	96

As evidenced by the Table above, there is no relationship between the tensile strength of a product and its HL hardness. As such, Momoda merely discloses cured products having high

hardness and low tensile strengths, and does not in any way teach or suggest a lens substrate comprising a cured product as claimed.

Moreover, as to the Examiner's assertion that "lenses must be able to resist impacts and drilling in order to be of use," Applicants respectfully note that impact resistance (strength) differs from tensile strength. Moreover, Momoda does not even describe or suggest rimless spectacles, or the use of the cured products therein.

Additionally, Applicants respectfully submit that one skilled in the art would not have been motivated to modify the teachings of Momoda as proposed by the Examiner. Momoda discloses a large number of components that could be used as components (I), (II) and (III). Applicants submit that one skilled in the art would not have been motivated to specifically select and combine the presently claimed components, in order to arrive at cured products having tensile strengths above 20 kgf, which would be contrary to the teachings of Momoda.

In view of the above, reconsideration and withdrawal of this rejection are respectfully requested.

Momoda '038 in view of secondary references

Claims 2, 8, 11 and 13 stand rejected under 35 U.S.C. 103(a) as obvious over Momoda in view of Imura et al. (U.S. 5,556,931) (hereinafter Imura '931). Additionally, claims 12 and 14 stand rejected as obvious over Momoda in view of Geffcken et al. (U.S. 3,713,869) (hereinafter Geffcken '869). Applicants respectfully traverse.

The Examiner acknowledges that Momoda is silent with regard to higher (m+n) values in the bifunctional polymerizable monomer (II). The Examiner further acknowledges that Momoda

is silent with regard to the use of a buffer layer interposed between the substrate and the hard coating layer. The Examiner relies on the teachings of Imura '931 and Geffcken '869 to overcome these deficiencies.

Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness. As noted above, Momoda fails to teach or suggest a photochromic lens substrate comprising a cured product of a polymerization curable composition, wherein the cured product has a tensile strength of 20kgf or more. The secondary references cited by the Examiner fail to cure this deficiency.

Imura '931 is directed to a polymerizable composition comprising at least two di(meth)acrylate compounds of general formula (I), suitable as a transparent resin. Geffcken '869 discloses a method of applying hard inorganic layers to plastics. However, both Imura '931 and Geffcken '869 fail to teach or suggest any components which could be used to provide a cured product having a tensile strength of 20 kgf or more. The disclosure of soft and hard monomers in Imura '931 does not provide any guidance for a person skilled in the art to arrive at the present invention. Thus, both references fail to teach or suggest a polymerizable curable composition or photochromic lens substrate as presently claimed.

Evidently, the cited references, alone or in combination, fail to teach or suggest every limitation of the instant invention. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

Miscellaneous

Applicants note that the corresponding EP application, which independent claim is substantially the same as present claim 1, has been found allowable over EP 1130038 (Momoda), and has issued as EP patent number 1607418.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and objections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Vanessa Perez-Ramos, Reg. No. 61,158 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By 

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